Environmental Justice Documentation 2019-2022 TIP

Shenango Valley Area Transportation Study (SVATS) MPO

The SVATS MPO, as part of each TIP update, includes the following documentation to provide a better understanding of the correlation between transportation projects in Mercer County and residents who are low-income or racial minorities—two groups who have been traditionally underserved by the transportation planning process. Environmental justice (EJ) is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. In layman's terms, this means that the MPO seeks to ensure that proposed projects are beneficial or at least not burdensome to minority and impoverished populations, and also that transportation improvements are occurring in—or at least not avoiding—neighborhoods where EJ populations reside. The use of these maps will assist the MPO with current and future development of projects and ensure equal treatment of all populations of the County in relation to transportation planning.

This analysis builds off of the EJ analysis done as part of the 2016 Long Range Transportation Plan (LRTP), which included EJ impact as one of our project ranking criteria. Projects involving improvement of pedestrian safety and accessibility are one key component of many of our newer projects.

The projects identified on the two maps show the locations of all designated highway and bridge projects. There are a few notes to go along with this: (1.) No project locations are being shown for line items on the TIP. Projects that come out of these funding categories are decided upon by PennDOT and the SVATS MPO subsequent to the TIP being passed. Examples of line item categories include but are not limited to local bridges, all weather pavement markings, and STU projects (which the MPO assigns to local sponsors on an annual basis). (2.) More than half of the projects on the TIP are bridge replacement or repair efforts. Bridge replacement is completed on a priority basis with major input from the Mercer County Bridge Engineer and PennDOT District 1-0's Bridge Unit. (3.) The vast majority of the projects on the current TIP are projects that were already identified on the current (2016) Long Range Transportation Plan and some have been programmed on the previous (2017-2020) TIP.

The Shenango Valley Shuttle Service (SVSS) provides fixed-route transit services within the Mercer County urbanized area, which includes the Cities of Farrell, Hermitage and Sharon and the Boroughs of Sharpsville and Wheatland. Routes are purposely designed to better-connect neighborhoods with high

minority and poverty rates to places of business and employment throughout the urbanized area of Mercer County (i.e. the Shenango Valley).

In addition to this service, transit offers an on-demand, shared ride service as well as an exclusive ride service (operating much like a taxi) to residents living throughout the county. These services operate under the moniker of Mercer County Community Transit.

As projects enter into preliminary engineering and final engineering phases, the MPO and PennDOT will ensure that issues concerning environmental justice are addressed on a project-by-project basis.

The largest, most expensive TIP projects (not including line items) are as follows:

Project Location Scope of Work		Municipality	
PA 18	Roadway restoration	Pymatuning	
US 62/PA 3008 (State St.)	Intersection improvement—roundabout	Hermitage	
PA 318 Replacement of Viaduct over Shenango River Wes		West Middlesex	
PA 173 Roadway restoration including new sidewalks		Grove City	

The projects in West Middlesex and Pymatuning Township are located in municipalities with relatively high-EJ populations. The Grove City project and the Hermitage project will provide upgraded or completely new (respectively) pedestrian facilities, which will assist populations without access to a vehicle. The Hermitage project, in particular, will allow for safer pedestrian access to many retail jobs and shopping opportunities, and will connect to a much larger network of sidewalks that connect to residential neighborhoods.

The attached maps help to demonstrate the correlation between project location and traditionally underserved populations. Both maps were created by using PennDOT's OneMap interactive mapping site. The Pennsylvania Department of Environmental Protection's (PA DEP's) EJA (Environmental Justice Analysis) tool was used to identify EJ populations in Mercer County. Data was classified at the Census Tract Block Group level, based on the most recent (2015) boundaries. MPO staff looked at this data and then set category breaks that would produce a meaningful map. These breaks are defined as follows:

	Minority Rate	Poverty Rate	
Yellow	5-10%	5-15%	
Orange	10—25%	15-30%	
Red	>25%	>30%	

All of the draft 2019 TIP projects were added onto these maps as well so that staff could understand the correlation between projects and the EJ populations.

The first map shows the percentage of racial minorities (non-white population) by municipality, using 2010 U.S. Census data. The highest minority population rates in Mercer County are located in the Shenango Valley (primarily Sharon, Farrell and Wheatland). Findley Township and Pine Township also have high minority rates, but this has been determined to be primarily attributed to the state correctional facility and a rehabilitative school for at-risk youth, respectively, within their boundaries.

The second map shows the overall poverty rate by municipality. This data is based upon the U.S. Census' American Community Survey (ACS) data from the most-recent five year period available. Unfortunately, poverty rates and other income characteristics are no longer part of the decennial census, and so we must analyze the less accurate ACS data (which often contains a large margin of error). Again, some of the highest rates tend to be in portions of the Shenango Valley communities. The west side of Greenville and the Reynolds area of Pymatuning Township also contain high poverty rates. A few rural areas have especially high poverty rates, notably portions of Lackawannock Township, and to a lesser degree, areas near Fredonia (such as Lake and Delaware Township). and There is a conjecture that high and growing Amish populations in these areas could be the reason for increasing poverty rates in these municipalities.

Please note that both maps are saved on PennDOT's OneMap interactive mapping site. If any members of the public or other stakeholders wish to see anything in detail that is hard to see on the printed page, or if they want to know exact percentages of a given EJ block group, they can contact Matt Stewart of the SVATS MPO/MCRPC (mstewart@mcrpc.com; 724-981-2412, x3206).

Also attached is a Benefits and Burdens analysis which explains the degree to which a project will affect minority and impoverished populations. The chart classifies projects based upon how large of an EJ population lives, works, or utilizes the project area as well as how large of a benefit or burden the proposed improvement will have to EJ populations.

Quantification of the EJ population can be simple, based on the maps which show where EJ populations reside. In other cases, MPO staff uses local knowledge of employment or retail characteristics to make an educated guess about EJ population impact. A good example of this would be the SR 3008 project in Hermitage: while the EJ population living in this area is relatively low, we know that this section of the county contains some of the most-intensive retail development in the county, and that most Shenango Valley residents (whether they live near her or in Farrell or Sharon) patronize businesses in this area. Moreover, an area like this contains myriad service-sector jobs, and we know from discussions from our transit providers (and review of their Coordinated Plan) that a large number of Valley residents rely on public transportation—or simply walking—to get from home to work or shopping in these areas.

Analysis of the level of benefit or burden that a particular project may have is determined through several methods. First, the scope of project, and what modes it will affect, is considered. A simple in-place bridge replacement, for example, won't typically have a major beneficial effect on the lives of surrounding residents (unless it contains sidewalks where they didn't exist before), but perhaps a new bus shelter or new pedestrian amenities will. A new or substantially altered road that would increase traffic significantly (not that we have any such projects on our current TIP) may have detrimental quality-of-life, noise, or pedestrian safety burdens to the public, while a simple road resurfacing usually won't alter the current functionality very much at all. Staff also takes into consideration previous EJ-population analysis done during any prior planning projects. Just about all of the non-asset management projects on our TIP (i.e. anything that is altering any asset beyond simple maintenance or preservation) requires a planning study. And when these studies were done, a concerted effort to identify and reach out to EJ populations is typically completed. This often leads to project recommendations, particularly understanding where missing pedestrian links need to be filled in. MPO staff also discusses components of each project with PennDOT's District 1-0 staff to get a clear-as-possible understanding as to the scope of each project, and works with them to ensure that EJ populations are considered.

This analysis—identifying EJ populations and their estimated level of benefit/burden is cataloged within the attached chart. For the 2019 TIP, the largest proportion of projects are anticipated to not affect (positively or negatively) any EJ populations. Many other projects are estimated to have a moderate benefit, and the reasons for this are explained in the chart. Only a very small number are anticipated to have a major benefit.

Fortunately, burdensome TIP projects are rare in Mercer County. However, one project—the Ohl Street bridge—is anticipated to have a moderate burden, and so this deserves further written description: the current plan is for this bridge—which has been closed for about a decade—to be removed. Significant analysis (Purpose and Need statement, various meetings, traffic count data, etc.) by PennDOT, the County bridge engineer, their consultant, and FHWA have shown this to be a relatively redundant bridge, and the cost of replacing it is difficult to justify given duplicative structures nearby. However, because a relatively large EJ population resides nearby, further analysis was done to understand how the population uses this, or more accurately would use the structure if it were opened again. One option considered was opening it up only to pedestrian use or to pedestrian and light traffic (i.e. weight limited traffic). A robust public survey was created by MPO and Greenville borough staff, under guidance from FHWA, to gauge public usage and perception of the Ohl Street bridge issue. Based on this analysis, it is currently presumed that demolition is the most likely course of action. If this does occur, there will be an inconvenience to some of the population living in the SE quadrant of the borough. However, the nearby Main Street bridge doesn't really add much time to a vehicular or pedestrian trip if, for example, someone is traveling from this neighborhood to Greenville's downtown to the east. Having the Main Street bridge so close allows for only a *moderate* inconvenience for most travelers in this portion of the county.

In conclusion, The Benefits and Burdens Analysis is an attempt to classify the degree to which EJ populations will be affected. On this TIP, none of the other projects besides Ohl Street are expected to be burdensome to any EJ populations, with the possible exception of inconveniences relating to construction. Overall, it is anticipated that all projects on the TIP will be beneficial, or at least have a neutral effect on the lives of those traditionally underserved by the transportation planning process.

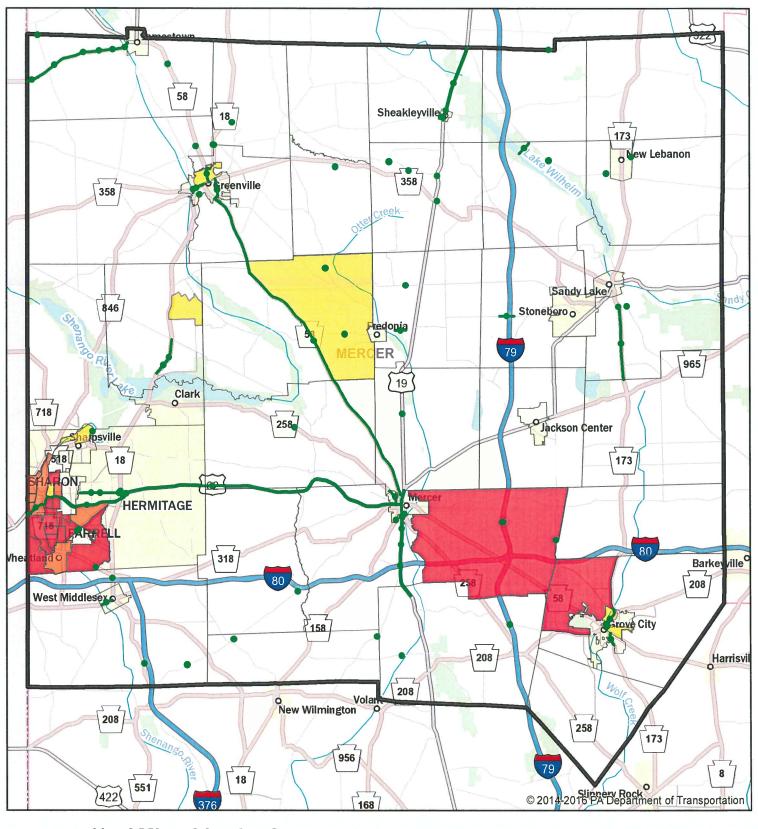
Enclosures: Map: EJ Populations--% Minority

Map: EJ Populations--% in Poverty

Environmental Justice Effects on TIP Capital Projects (Benefits and

Burdens Analysis)

Percent of Racial Minorities, By Census Block Group Mercer County, PA



% of Minorities by Community

MPMS Draft TIP Projects - Points

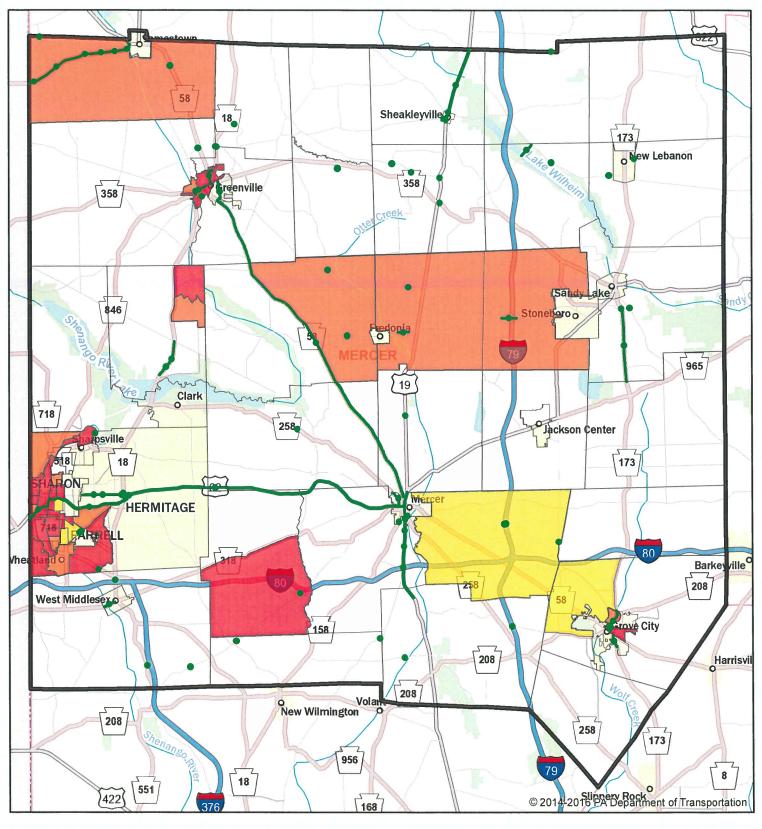
5-10% 10-25%

MPMS Draft TIP Projects - Lines





Percent of Population in Poverty, By Census Block Group Mercer County, PA

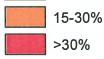


% of Community Population in Poverty

MPMS Draft TIP Projects - Points

5-15%

MPMS Draft TIP Projects - Lines





Environmental Justice Effects on TIP Capital **Projects**

Benefits & Burdens Analysis

High EJ Population

No significant EJ Population
(EJ populations are defined as lowincome or minority populations living, working, or utilizing the surrounding geographical area)

Significant Benefit Expected

Minor Benefit Expected

No Tangible Benefit Expected

Minor Burden Expected

Major Burden Expected

(Benefit/Burden is defined as how the proposed improvement would affect an EJ population)

Purple Shading = Carryover Project From 2017-2020 TIP

MPMS	Project	e)	606.	Justification (
1671	Kelly Road Bridge Replacement			Project will provide safe recreational access for vehicles and pedestrians. Somewhat large EJ population nearby.
1745	Ohl Street Bridge			Bridge likely to be removed, which will create a minor inconvenience for residents (see narrative for more information).
110234	PA 18/SR 4006 Intersection			
				No significant EJ poulation nearby.
98384	PA 18: Birchwood-Rutledge			No significant EJ poulation nearby. High EJ Population uses and lives near corridor. Improved pedestrian
109773	PA 18: 358-Mill Hill Road		2011	connections will provide safer access. Minor bridge rehab project in area with relatively low EJ population.
78849	SR 18 over Hogback Run Bridge Rehabilitation			Investment in primary corridorthat provides job access.
97272	SR 18/Shenango River Bridge Rehabilitation		Ketho	No significant EJ population nearby; assumed moderate use by EJ commuters
110764	SR 18/SR 4005 Intersection			High EJ population. Mostly limited to signal/intersection imrprovements; may have minor beneficial effect for EJ population.
97907	US 19 Corridor Improvements			No significant EJ population nearby. Potentially some major safety improvements for Amish (at Old Mercer Road).
109735	US 19: Segment -Venango St.			EJ population nearby in Mercer Borough. Scope of project entails asset management and will not change conditions.
98431	US 19 : Sandy Creek-SR 1014			No significant EJ poulation nearby.
97331	US 19 Bridge Over Otter Creek Tributary #1			No significant EJ poulation nearby.
90032	US 19 Bridge Over Neshannock Creek Tributary			No significant EJ poulation nearby.
97300	Mercer 2019 Bridge Shotcrete			Relatively high EJ poulation nearby, but improvements will occur within existing culverts and not have impact on population.
97047	US 19 Retaining Wall			No significant EJ population nearby; project scope will correct condition, not alter function of roadway.
98440				
97307	PA 58: Ohio Line-US 322			No significant EJ population nearby; simple resurfacing. Moderate poverty rate in project area (Greene Township). Project just
	PA 58 Bridge Over Faherty Run		718	replacing bridge on rural roadway. Corridor traverses multiple municipalities; many with moderate EJ populations.
110168	PA 58 Safety Study			Project ltd. to study, but EJ population to be engaged No significant EJ population lives nearby, but will allow for safer ped access
105775	US 62/ 3008 (State Street) Intersection			along a busy corridor near many service-sector jobs Corridor traverses multiple municipalities; some moderate EJ populations.
110218	Mercer US 62 Safety Study			Project ltd. to study, but EJ population to be engaged Low EJ population in immediate vicinity, but bridge located near municpal
1687	PA 158 Bridge Over Brandy Run		_	(Mercer) park. Project will maintain conditions.
98397	SR 173 Resurfacing from Vath Rd. to SR 1004		The same	No significant EJ population nearby Moderate EJ population nearby. Project will provide safer access for
109154	PA 173: Kocher Road-Main Street			pedestrians (new sidewalks) and vehicles.
106281	Bessemer & Lake Erie - Railroad Crossings (various locations)			Project scope limited to repair of various railroad crossings and should not affect EJ populations, which are presumed to be low.
109139	PA 258: E. South St. to Blossom	M.		No significant EJ population nearby; project limited to rehabilitation of pavement
1923	SR 318-West Middlesex Viaduct Replacement			Bridge is important means of access between two communities with moderate EJ populations.
47920	Mercer Avenue Intersections			Project will create pedestrian amenities and other improvements in an area with high EJ populations that use and live in the area.
73494	SR 760 (Broadway Ave.) Bridge over Bobby Run Replacement			Moderate EJ population; Simple bridge rehabilitation along an industrial corridor with many jobs.
78923	SR 1001 (Fredonia Rd.) Over Lil Shenango River Bridge Rehab			No significant EJ population nearby
88484	SR 1002 Bridge Over Otter Creek			EJ population (moderate poverty) in block group, but scope of work limited to bridge perservation.
88481	SR 1001 (Fredonia Rd.) Over I-79 Bridge Rehabilitation			Moderate EJ population (poverty) in nearby (Lake Township), but project scope limited to bridge rehab.
1820	SR 1009 Bridge Over Lake Wilhem			No significant EJ population nearby
58080	SR 2001 BridgeOver Indian Run			
				No significant EJ population nearby
58081	SR 2002 (Leesburg Rd.) Over Nesh. Creek Bridge Rehabilitation			No significant EJ population nearby
1925	Blacktown Road Bridge Over 1-79			No significant EJ population nearby No significant EJ population nearby. (Findley Township has high minority level,
58082	SR 2007 Bridge over Mill Crek			but mostly attributed to state prison).
88842	Clintonville Rd. Over I-79 Bridge Rehabiliation (#1)			No significant EJ population nearby
88483	Clintonville Rd. Over I-79 Bridge Rehabiliation (#2)			No significant EJ population nearby High EJ population (poverty) in somewhat-nearby municipality, but project
97292	SR 3007 Bridge Over W. Branch of Neshannock Creek			limited to bridge rehablitation.
109077	State Stret Pedestrian Improvements			Project to provide new pedestrian amenities in area where need is very high (retail/service sector jobs and shopping).
97268	SR 4001 Bridge Over Sugar Run Tributary		Section .	Area as moderate EJ population (Greene Twp. in general), but project limited to bridge rehabilitation.
109146	SR 4011 (Columbia Ave): SR 58 to SR 358		100	Low EJ population in immediate vicinity, but some block groups nearby are higher-EJ. Project will provide safer/better access.
97324	SR 4017 Bridge Over Little Shenango River			No significant EJ population nearby
58096	SR 4021 Bridge Over Morrison Run			No significant EJ population nearby
109741	Henry Road Bridge			No significant EJ population nearby
102638	Vehicle Purchase			Project will affect transit staff, not users of system
106707	Replace Administration vehicle			Project will affect transit staff, not users of system
11059				Improving fleet/conditions for transit riding population; typically reside in EJ
File	Purchase Small Transit Buses			areas and are lower income than average Project will greatly improve mobility for population with disabilities, thus
77148	Transit ADA Related Expenses			improving access to transportation
83653 95413/8	Asset Maintenance Expenses			Project limited to operating assistance to transit agency.
3656-8	Office and Garage Improvements/Equipment Upgrades		ga un	Project will affect transit staff, not users of system
95412	Transit Safety and Security Improvements			Project will add to safety and well-being of transit riders Improving fleet/conditions for transit riding population; typically reside in EJ
95415	Purchase SVSS Bus			areas and are lower income than average

Transit Projects